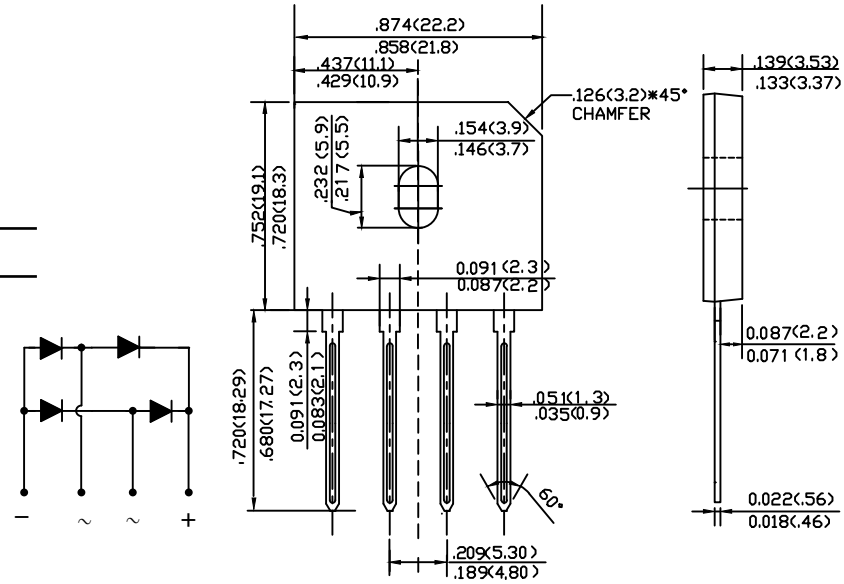
GBU35005A THRU GBU3510A

SINGLE PHASE 35.0 AMP GLASS PASSIVATED BRIDGE RECTIFIER

Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Plastic material-UL flammability 94V-0

GBU



dimensions in inches and (millimeters)

Mechanical Data

- Case: G B U , molded plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Mounting Position: Any
- Marking: Type Number
- Lead Free: For RoHS / Lead Free Version

Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified.
Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	GBU 35005A	GBU 3501A	GBU 3502A	GBU 3504A	GBU 3506A	GBU 3508A	GBU 3510A	UNITS
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{DC}	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Average Rectified Output Current (with heatsink) @T_C =90℃ (without heatsink)	$I_{F(AV)}$	35 3.6							A
Non-Repetitive Peak Forward Surge Current @Tj=25℃ 8.3ms Single half sine-wave superimposed @Tj=125℃ on rated load (JEDEC Method)	I_{FSM}	350 280							A
Non-Repetitive Peak Forward Surge @Tj=25℃ Current 1 ms Single half sine-wave @Tj=125℃ superimpose on rated load (JEDEC Method)	I_{FSM}	700 560							A
Forward Voltage per element @IF=17.5A	V_{FM}	1.1							V
Peak Reverse Current @T_A =25℃ At Rated DC Blocking Voltage @T_A =125℃	I_R	5.0 200							uA
I^2t Rating for fusing (t <8.3ms)	I^2t	508.375							A^2s
Typical Junction Capacitance per leg (Note 2)	C_J	110							pF
Typical Thermal Resistance per leg (Note 3)	$R_{\theta JC}$	1.6							℃/W
(Note 4)	$R_{\theta JL}$	1.0							
Operating and Storage Temperature Range	T_J,T_{STG}	-55to+150							℃

Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Case, device mounted on heatsink
3. Thermal Resistance Junction to Lead, device mounted on heatsink

Fig. 1 Output Current Derating Curve

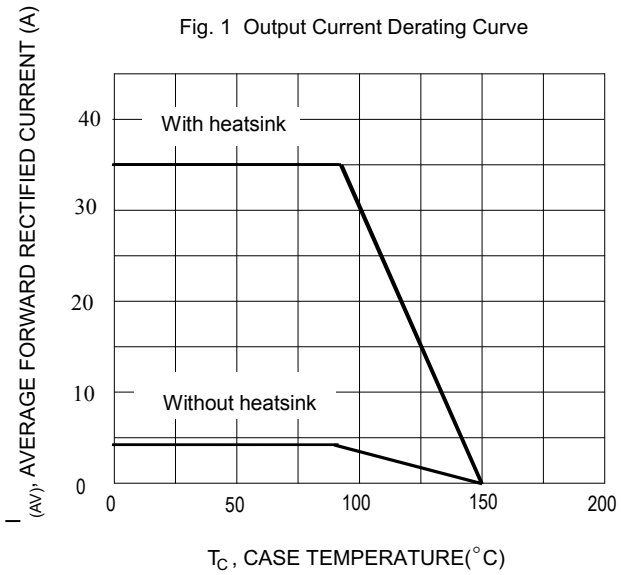


Fig. 2 Typical Forward Characteristics (per leg)

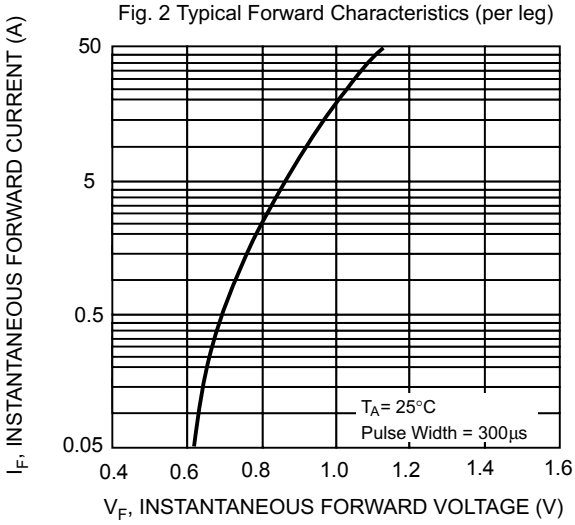


Fig. 3 Maximum Peak Forward Surge Current (per leg)

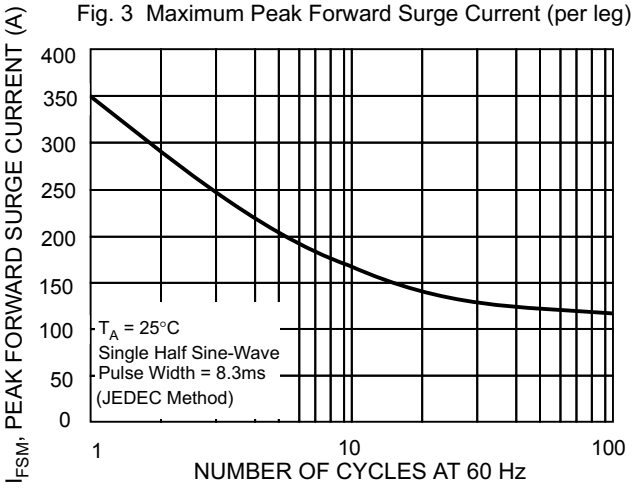
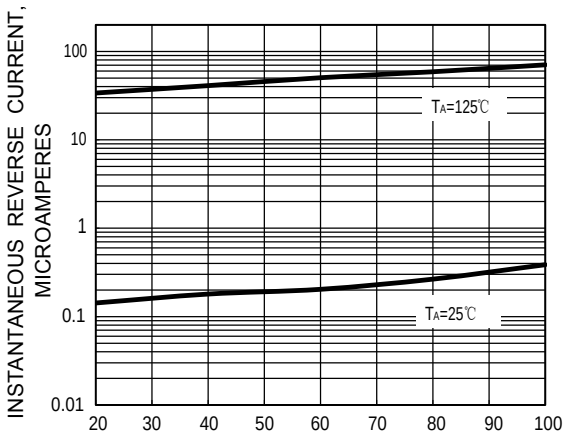


Fig. 4 Typical Junction Capacitance



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